

voice signature of a user, checking a video of a user, or checking with a user mobile telephone;
at least one speaker mounted in the housing.

2. The device of claim 1, wherein a phone and a speech system authenticate a user before providing access to a secured system.

3. The device of claim 1, further comprising a smart phone to provide an additional authentication or confirmation before granting full control of the appliance by using the voice commands.

4. The device of claim 1, comprising a mobile device with a public user key in an encrypted communication with the processor, wherein the processor authenticates the user based on a private user key.

5. The device of claim 1, wherein the device communicates with a remote server to analyze user dependent voice commands.

6. A method comprising:

receiving audio, via one or more microphones;

processing a signal representation of the audio, via a processor, to execute a first security level authentication, and if encountering a secured request, execute a second security level authentication by checking voice signature of a user or authenticating the user by turning on a camera, and if the second security level authentication is unsuccessful, increase a counter to specify a period to wait before allowing another authentication; and

outputting sound via one or more speakers arranged in a base end of the device.

7. The method of claim 6, wherein recognizing the speech comprises processing the signal representation to parse the speech.

8. The method of claim 6, further comprising processing the signal representation to reduce double talk detected in the signal representation, in conjunction with cancelling the acoustic echoes detected in the signal representation.

9. The method of claim 6, wherein processing the signal representation comprises substantially cancelling acoustic echoes detected in the signal representation, and then parsing the speech in the signal representation.

10. A device comprising:

at least one microphone to receive audio;

a processor mounted to process a signal representation of the audio to (a) recognize speech in the signal representation of the audio, (b) substantially cancel acoustic echoes detected in the signal representation of the audio, (c) execute first security level authentication, (d)

if encountering a secured request, execute a second security level authentication by checking voice signature of a user or authenticating the user by turning on a camera, and (e) if the second security level authentication is unsuccessful, increase a counter to specify a period to wait before allowing another authentication; and

at least one speaker to output sound in a direction away from the at least one microphone.

11. The device of claim 10, comprising a gateway coupled to the processor to communicate with home appliances, the gateway communicating with a plurality of home area network (HAN) protocols the gateway translating HAN data from one protocol to another and providing interoperability among appliances, wherein the processor is adapted to communicate using the gateway with an appliance having the second security level authentication requiring additional check prior to granting full control of the appliance by using voice commands

12. The device of claim 10, comprising a camera.

13. The device of claim 10, further comprising a smart phone to provide an additional authentication or confirmation before granting full control of the appliance by using voice commands.

14. The device of claim 10, comprising a gateway communicating with a plurality of home area network (HAN) protocols including Zigbee (IEEE 802.15.4), Bluetooth (IEEE 802.15.1) and WiFi, the gateway translating Zigbee, Bluetooth and WiFi data from one protocol to another.

15. The device of claim 10, comprising image recognition code.

16. The device of claim 10, wherein the at least one speaker and the at least one microphone are coaxially aligned.

17. The device of claim 10, further comprising a sound distribution cone arranged inside of the housing to distribute the sound emitted from the at least one speaker.

18. The device of claim 17, wherein the at least one speaker and the sound distribution cone are coaxially aligned.

19. The device of claim 17, wherein the sound distribution cone directs the sound at least partially in a radial outward direction.

20. The device of claim 17, wherein the sound distribution cone directs the sound outward from the housing proximal to the base.

* * * * *